

REMARKS

This responds to the Office Action mailed on February 20, 2009.

Claims 1-2, 4 and 9 are amended. The support for the amendments to claim 1 can be found in [0008] of the specification (Pub. No. 2005/0171334) and claim 2 as originally filed. Applicant respectfully submits that no new matter is added by way of amendment. Claims 1-9 are pending.

The 35 U.S.C. § 102 Rejection

Claims 1-3 and 5-6 were rejected under 35 U.S.C. § 102(b) for anticipation by Mosbach (U.S. Patent No. 6,489,418 B1). This rejection is respectfully traversed.

“Anticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, arranged as in the claim.” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)).

Claim 1, as amended, recites: “A method of producing a molecularly-imprinted material, comprising: (a) synthesizing a peptide corresponding to an epitope of a target peptide or protein on a disposable surface modified support to produce a support surface-attached peptide; (b) providing a selected monomer mixture; (c) contacting said monomer mixture with said support surface-attached peptide; (d) initiating polymerisation of at least one crosslinking reaction; (e) dissolving or degrading said support surface-attached peptide and said support; and (f) obtaining said molecularly imprinted material, wherein an epitope is a peptide that corresponds to only part of the target peptide or protein.”

However, Mosbach does not disclose the use of a peptide corresponding to an epitope (a peptide that represents only part of a larger peptide or protein) of a target peptide or protein. Applicant respectfully submits that, in view of the amendments, the claims cannot be interpreted to include an entire protein. Thus, the claims are not anticipated by Mosbach.

Therefore, Applicant respectfully requests withdrawal of the § 102(b) rejection.

The 35 U.S.C. § 103 Rejection

Claims 1-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mosbach, as applied to claims 1-3, 5 and 6, *supra*. This rejection is respectfully traversed.

As discussed above, claim 1, as amended, recites: “A method of producing a molecularly-imprinted material, comprising: (a) synthesizing a peptide corresponding to an epitope of a target peptide or protein on a disposable surface modified support to produce a support surface-attached peptide; (b) providing a selected monomer mixture; (c) contacting said monomer mixture with said support surface-attached peptide; (d) initiating polymerisation of at least one crosslinking reaction; (e) dissolving or degrading said support surface-attached peptide and said support; and (f) obtaining said molecularly imprinted material, wherein an epitope is a peptide that corresponds to only part of the target peptide or protein .”

Mosbach only discloses the use of the entire target protein, namely insulin or trypsin, being used as the template. By using such an attachment, Mosbach is unable to control which portion of the protein is actually templated since the entire protein is available for interaction with monomers. Thus, in the Mosbach method, the interaction of monomers with a specific part of the protein sequence, e.g., a portion corresponding to an epitope of a target peptide or protein, cannot be controlled.

The claims, as amended herein, related to a template being a specific, identifiable epitope (a peptide that represents only part of a larger peptide or protein) of a target peptide or protein. Mosbach does not disclose or suggest the use of a template differing from the target protein. Nor does Mosbach disclose or suggest the use of a peptide corresponding to an epitope of a target peptide or protein.

Applicant respectfully submits that the Examiner has failed to make *prima facie* obviousness rejection. The method disclosed by Mosbach provides no teaching or suggestion that a peptide corresponding to an epitope of a target peptide or protein may be or should be used. The presently amended claims can thus not be considered obvious in view of Mosbach.

As the Examiner points out Mosbach teaches in Example 4 attachment of insulin to a surface-modified silica surface. Mosbach constantly teaches only the use of the target molecule itself, namely insulin, being used as the template. In such an attachment Mosbach is unable to control which part of the insulin molecule is actually templated since the entire molecule is

available for interaction with monomers. Therefore, in the Mosbach method the interaction of monomers with a specific part of the insulin sequence cannot be controlled. The claims, as amended herein, relate to a template being a specific, identifiable epitope of a target polypeptide or protein. Mosbach is silent regarding the use of a template differing from the target protein in general, and also regarding a peptide corresponding to an epitope of a target polypeptide or protein.

Additionally, as Mosbach disclosed that the target protein itself (insulin in Example 4, trypsin in Example 3) is used as a template, the drawback is that not all targets are commercially available or possible to prepare synthetically. The present invention allows the preparation of a molecularly imprinted material which by using a template being a peptide corresponding to an epitope of the target polypeptide or protein makes it possible to bind macromolecules such as peptides, oligopeptides, polypeptides, and proteins that would not be possible by conventional methods, for example, as disclosed by Mosbach.

Therefore, Applicant respectfully requests withdrawal of the § 103(a) rejection.

To clarify the remarks in the response dated June 6, 2005 and July 6, 2005, Applicant did not admit that the peptides, support or monomers are not patentably distinct. Rather, Applicant stated that with regards to the peptides, monomers, and support, while those compounds/compositions may be patentably distinct as compounds/compositions, within the context of the method claims, it is not necessary to argue about their actual composition at this time, e.g., specific sequence, in light of the method claims. Additionally, Applicant would like to point out that “maintaining” is very different from “conceding,” and the language in question was not used in conjunction with the subject matter of claims 5 and 6 (support and monomer mixtures, respectively).

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (612) 373-6905 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 28th day of April, 2009.